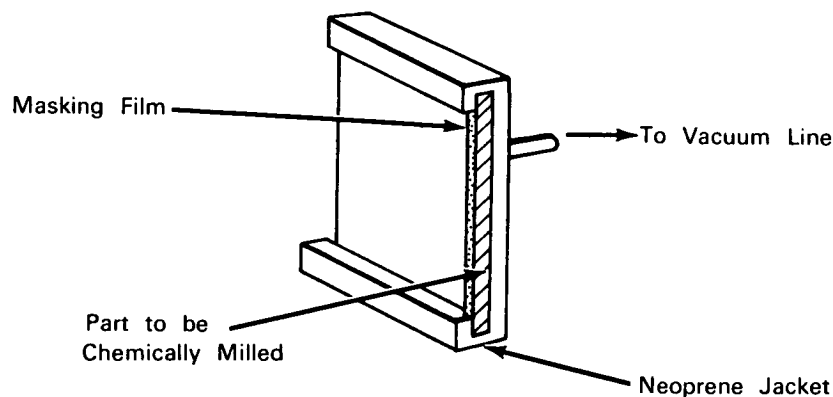


NASA TECH BRIEF



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Reusable Neoprene Jacket Protects Parts for Chemical Milling



The problem: In one method of preparing a metal part or panel for chemical milling, the entire part is dipped into a masking solution to provide a coating which is then hand-stripped from the areas to be milled. A method was sought to reduce the preparation time and the amount of masking material required for milling a large number of identical parts.

The solution: A reusable neoprene jacket is used to cover the back and upper rim of the part before application of masking solution to the surface to be milled.

How it's done: The neoprene jacket is made slightly larger than the part to be chemically milled. After the jacket is slipped over the part, the edges around the part are sealed with plastic tape and the entire exposed surfaces of the tape and part are brushed with masking solution. Air is evacuated from the jacket to a pressure of approximately 22 inches of mercury to insure a good seal at the edges.

A standard template is used in trimming the tape and masking film to the required pattern for chemical milling by any conventional method. After milling is completed the jacket is removed and set aside for reuse.

Note: Inquiries concerning this invention may be directed to:

Technology Utilization Officer
Western Operations Office
150 Pico Boulevard
Santa Monica, California, 90406
Reference: B65-10179

Patent status: NASA encourages the immediate commercial use of this invention. Inquiries about obtaining rights for its commercial use may be made to NASA, Code AGP, Washington, D.C., 20546.

Source: Ryan Aeronautical Company, under contract to Western Operations Office (WOO-071)

Categories No. 03 and 05